**Paging :**

#include<stdio.h>

#include<conio.h>

Int main()

{

int ms, ps, nop, np, rempages, i, j, x, y, pa, offset;

int s[10], fno[10][20];

printf("\nEnter the memory size ");

scanf("%d",&ms);

printf("\nEnter the page size");

scanf("%d",&ps);

nop = ms/ps;

printf("\nThe no. of pages available in memory are %d ",nop);

printf("\nEnter number of processes ");

scanf("%d",&np);

rempages = nop;

for(i=1;i<=np;i++)

{

printf("\nEnter no. of pages required for p[%d] ",i);

scanf("%d",&s[i]);

if(s[i] >rempages)

{

printf("\nMemory is Full");

break;

}

rempages = rempages - s[i];

printf("\nEnter pagetable for p[%d]",i);

for(j=0;j<s[i];j++)

scanf("%d",&fno[i][j]);

}

printf("\nEnter Logical Address to find Physical Address ");

printf("\nEnter process no. and pagenumber and offset -");

scanf("%d %d %d",&x,&y, &offset);

if(x>np || y>=s[i] || offset>=ps)

printf("\nInvalid Process or Page Number or offset");

else

{ pa=fno[x][y]\*ps+offset;

printf("\nThe Physical Address is -- %d",pa);

}

return 0;

}

OUTPUT:

Enter the memory size -- 1000

Enter the page size -- 100

The no. of pages available in memory are -- 10

Enter number of processes -- 3

Enter no. of pages required for p[1]-- 4

Enter pagetable for p[1] --- 8 6 9 5

Enter no. of pages required for p[2]-- 5

Enter pagetable for p[2] --- 1 4 5 7 3

Enter no. of pages required for p[3]-- 5

Memory is Full

Enter Logical Address to find Physical Address

Enter process no. and pagenumber and offset -- 2 3 60

The Physical Address is -- 760

**SEGMENTATION :**

// Online C compiler to run C program online

#include <stdio.h>

int main()

{

int n,nm,p,x=0,y=1,t=300,of,i;

printf("Enter the memory size:\n");

scanf("%d",&nm);

printf("Enter the no.of segments:\n");

scanf("%d",&n);

int s[n];

for(i=0;i<n;i++)

{

printf("enter the segment size of %d:",i+1);

scanf("%d",&s[i]);

x+=s[i];

if(x>nm)

{

printf("memory full segment %d is not allocated",i+1);

x-=s[i];

s[i]=0;

}

}

printf("-----OPERATIONS------");

while(y==1)

{

printf("enter the no.of operations:\n");

scanf("%d",&p);

printf("enter the offset:");

scanf("%d",&of);

if(s[p-1]==0)

{

printf("segment is not allocated\n");

}

else if(of>s[p-1])

{

printf("out of range!..");

}

else

{

printf("the segment %d the physical address is ranged from %d to %d\n the address of operation is%d\n",p,t,t+s[p-1],t+of);

}

printf("press 1 to continue");

scanf("%d",&y);

}

}

OUTPUT :

